**BRUHAT BANAGLORE MAHANAGARA PALIKE**

**Executive Engineer -yelahanka Division**

**Detailed Estimate**

**Name of the Work** Asphalting and improvements to roads at Maruthinagara 1st main road from (Ch.00 to 450.00 mtr) in ward No- 01 of yelahanka sub division.

**Estimate Amount : 8000000.00**

| Sl. No. | Description of item | Unit | Nos | Dimension | | | Total Qty | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| | | | | L in m | B in m | D in m | | | |
| | **CIVIL WORKS** | | | | | | | | |
| 1 | Removing & Refixing Stone Slabs of drains and Pointing in C.M(1:3). | | | | | | | | |
| | **(Page No 25., I.No.5.33 of KPWD S.R 2016-17)** | | | | | | | | |
| | | Sqm | | | | | | | |
| | *Basic rate* | *76.00* | | | | | | | |
| | *Area Wieght age @ 6%* | *4.56* | | | | | | | |
| | *Total Rate in Rs* | *80.56* | | | | | | | |
| | **Maruthinagar 1st main road from Kogilu main road** | | | | | | | | |
| | **RHS** | | | | | | | | |
| | *Ch: (0 - 20)* | | 1 | 20 | 0.90 | | 18.00 | | |
| | *Ch: (23 - 48)* | | 1 | 25 | 1.10 | | 27.50 | | |
| | *Ch: (53 - 103)* | | 1 | 50 | 0.90 | | 45.00 | | |
| | *Ch: (107 - 151)* | | 1 | 44 | 0.90 | | 39.60 | | |
| | *Ch: (157 - 180)* | | 1 | 23 | 1.20 | | 27.60 | | |
| | *Ch: (180 - 195)* | | 1 | 15 | 0.90 | | 13.50 | | |
| | *Ch: (201 - 212)* | | 1 | 11 | 1.20 | | 13.20 | | |
| | *Ch: (218 - 246)* | | 1 | 28 | 0.90 | | 25.20 | | |
| | *Ch: (253 - 280)* | | 1 | 27 | 0.90 | | 24.30 | | |
| | *Ch: (366 - 394)* | | 1 | 28 | 0.90 | | 25.20 | | |
| | *Ch: (399 - 420.5)* | | 1 | 21.5 | 1.20 | | 25.80 | | |
| | *Ch: (420.5 - 457.9)* | | 1 | 37.4 | 1.20 | | 44.88 | | |
| | **LHS** | | | | | | | | |
| | *Ch: (0 - 42)* | | 1 | 42 | 0.90 | | 37.80 | | |
| | *Ch: (47 - 71)* | | 1 | 24 | 0.90 | | 21.60 | | |
| | *Ch: (75 - 269)* | | 1 | 194 | 0.90 | | 174.60 | | |
| | *Ch: (276 - 346)* | | 1 | 70 | 0.90 | | 63.00 | | |
| | *Ch: (352 - 389)* | | 1 | 37 | 0.90 | | 33.30 | | |
| | *Ch: (395 - 420.5)* | | 1 | 25.5 | 0.90 | | 22.95 | | |
| | *Ch: (420.5 - 431)* | | 1 | 10.5 | 0.90 | | 9.45 | | |
| | *Ch: (439 - 457.9)* | | 1 | 18.9 | 0.90 | | 17.01 | | |
| | | | | | | | **709.49** | | |
| | Deduction for damaged and missing 31% | | | | | | **-219.94** | | |
| | | | | | | | **489.55** | **80.56** | **39437.99** |
| 2 | KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 | | | | | | | | |
| | **(Page No142., I.No.19.1 of KPWD S.R 2016-17).** | | | | | | | | |
| | | Cum. | | | | | | | |
| | *Basic rate* | *82.00* | | | | | | | |
| | *Area Wieght age @ 6%* | *4.92* | | | | | | | |
| | *Total Rate in Rs* | *86.92* | | | | | | | |
| | *Desilting* | | | | | | | | |
| | **Maruthinagar 1st main road from Kogilu main road** | | | | | | | | |
| | **RHS** | | | | | | | | |
| | *Ch: (0 - 20)* | | 1 | 20 | 0.60 | 0.600 | 7.20 | | |
| | *Ch: (23 - 48)* | | 1 | 25 | 0.60 | 0.600 | 9.00 | | |
| | *Ch: (53 - 103)* | | 1 | 50 | 0.60 | 0.600 | 18.00 | | |
| | *Ch: (107 - 151)* | | 1 | 44 | 0.60 | 0.600 | 15.84 | | |

| Sl. No. | Description of item | Unit | Nos | Dimension L in m | B in m | D in m | Total Qty | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| | Ch: (157 - 180) | | 1 | 23 | 0.60 | 0.600 | 8.28 | | |
| | Ch: (180 - 195) | | 1 | 15 | 0.60 | 0.600 | 5.40 | | |
| | Ch: (201 - 212) | | 1 | 11 | 0.60 | 0.600 | 3.96 | | |
| | Ch: (218 - 246) | | 1 | 28 | 0.60 | 0.600 | 10.08 | | |
| | Ch: (253 - 280) | | 1 | 27 | 0.60 | 0.600 | 9.72 | | |
| | Ch: (366 - 394) | | 1 | 28 | 0.60 | 0.600 | 10.08 | | |
| | Ch: (399 - 420.5) | | 1 | 21.5 | 0.60 | 0.600 | 7.74 | | |
| | Ch: (420.5 - 457.9) | | 1 | 37.4 | 0.60 | 0.600 | 13.46 | | |
| | LHS | | | | | | | | |
| | Ch: (0 - 42) | | 1 | 42 | 0.60 | 0.600 | 15.12 | | |
| | Ch: (47 - 71) | | 1 | 24 | 0.60 | 0.600 | 8.64 | | |
| | Ch: (75 - 269) | | 1 | 194 | 0.60 | 0.600 | 69.84 | | |
| | Ch: (276 - 346) | | 1 | 70 | 0.60 | 0.600 | 25.20 | | |
| | Ch: (352 - 389) | | 1 | 37 | 0.60 | 0.600 | 13.32 | | |
| | Ch: (395 - 420.5) | | 1 | 25.5 | 0.60 | 0.600 | 9.18 | | |
| | Ch: (420.5 - 431) | | 1 | 10.5 | 0.60 | 0.600 | 3.78 | | |
| | Ch: (439 - 457.9) | | 1 | 18.9 | 0.60 | 0.600 | 6.80 | | |
| | New drain | | | | | | | | |
| | Maruthinagar 1st main road from Kogilu main road | | | | | | | | |
| | RHS | | | | | | | | |
| | Ch: (399 - 457.9) | | 1 | 58.9 | 1.20 | 0.800 | 56.54 | | |
| | | | | | | | 327.19 | 86.92 | 28439.53 |
| 3 | KSRB 4-1.2 : Providing and laying in position plain cement concrete of mix1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregtes @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted,in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications Specification No. KBS 4.1, 4.2 (Page No 12., I.No.4.2 of KPWD S.R 2016-17). | | | | | | | | |
| | | Cum. | | | | | | | |
| | Basic rate | 5046.00 | | | | | | | |
| | Area Wieght age @ 6% | 302.76 | | | | | | | |
| | Total Rate in Rs | 5348.76 | | | | | | | |
| | New drain | | | | | | | | |
| | Maruthinagar 1st main road from Kogilu main road | | | | | | | | |
| | RHS | | | | | | | | |
| | Ch: (399 - 457.9) | | 1 | 58.9 | 0.90 | 0.150 | 7.95 | | |
| | | | | | | | 7.95 | 5348.76 | 42530.67 |
| 4 | Providing and laying Plain /reinforced cement concrete for side drains wall and bottom thickness 15cm using M20 nominal mix concrete with OPC cement at 300kg with 20mm and down size granite metal coarse aggregate at 0.69 cum and fine aggregate at 0.43 cum machine mixed well compacted for walls at bottom including centring shuttering cost of materials HOM of machineries curing etc.completeexcluding cost of steel as per MORTH specification No.1500,1700,2200 (Page No265., I.No.37.59.2 of KPWD S.R 2016-17). | | | | | | | | |
| | | Cum. | | | | | | | |
| | Basic rate | 10408.00 | | | | | | | |
| | Area Wieght age @ 6% | 624.48 | | | | | | | |
| | Total Rate in Rs | 11032.48 | | | | | | | |
| | New drain | | | | | | | | |
| | Raft | | | | | | | | |
| | Maruthinagar 1st main road from Kogilu main road | | | | | | | | |
| | RHS | | | | | | | | |
| | Ch: (399 - 457.9) | | 1 | 58.9 | 0.90 | 0.150 | 7.95 | | |
| | Wall | | | | | | | | |
| | Maruthinagar 1st main road from Kogilu main road | | | | | | | | |
| | RHS | | | | | | | | |

| Sl. No. | Description of item | Unit | Nos | Dimension | | | Total Qty | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| | | | | L in m | B in m | D in m | | | |
| | Ch: (399 - 457.9) | | 2 | 58.9 | 0.15 | 0.700 | 12.37 | | |
| | | | | | | | 20.32 | 11032.48 | 224185.51 |
| 5 | KSRB 4.9.2 : Providing T .M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 for TMT Bars Fe500 | | | | | | | | |
| | **(Page No 17., I.No.4.46.2 of KPWD S.R 2016-17).** | | | | | | | | |
| | ***Basic rate*** | **Tonne** | | | | | | | |
| | ***Area Wieght age @ 6%*** | ***56050.00*** | | | | | | | |
| | ***Total Rate in Rs*** | ***3363.00*** | | | | | | | |
| | ***New drain*** | ***59413.00*** | | | | | | | |
| | **Taking 60kg/cum** | | | | | | | | |
| | | | | | | | 1.22 | | |
| | | | | | | | 1.22 | 59413.00 | 72438.11 |
| 6 | Providing precast slab of 100 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge- | | | | | | | | |
| | **Data rate** | | | | | | | | |
| | ***Total Rate in Rs*** | **Sqm** | | | | | | | |
| | | ***1757.00*** | | | | | | | |
| | ***For damaged Drain*** | | | | | | 219.94 | | |
| | ***New drain*** | | | | | | | | |
| | **Maruthinagar 1st main road from Kogilu main road** | | | | | | | | |
| | **RHS** | | | | | | | | |
| | Ch: (399 - 457.9) | | 1 | 58.9 | 0.90 | | 53.01 | | |
| | | | | | | | 272.95 | 1757.00 | 479576.49 |
| 7 | Providing precast slab of 250 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge- | | | | | | | | |
| | **Data rate** | | | | | | | | |
| | ***Total Rate in Rs*** | **Sqm** | | | | | | | |
| | | ***4725.00*** | | | | | | | |
| | ***Culverts*** | | | | | | | | |
| | | | 5 | 5 | 1.50 | | | | |
| | | | | | | | 0.00 | 4725.00 | 0.00 |
| 8 | KSRB 4-1.6 ; Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation,plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 | | | | | | | | |
| | **(Page No 12., I.No.4.6 of KPWD S.R 2016-17).** | | | | | | | | |
| | ***Basic rate*** | **Cum.** | | | | | | | |
| | ***Area Wieght age @ 6%*** | ***5441.00*** | | | | | | | |
| | | ***326.46*** | | | | | | | |
| | ***Coping -SB*** | ***5767.46*** | | | | | | | |
| | ***Flagging Course*** | | | | | | | | |
| | **Maruthinagar 1st main road from Kogilu main road** | | | | | | | | |
| | **RHS** | | | | | | | | |

| Sl. No. | Description of item | Unit | Nos | Dimension | | | Total Qty | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| | | | | L in m | B in m | D in m | | | |
| | Ch: (0 - 20) | | 2 | 20 | 0.10 | 0.075 | 0.30 | | |
| | Ch: (23 - 48) | | 2 | 25 | 0.10 | 0.075 | 0.38 | | |
| | Ch: (53 - 103) | | 2 | 50 | 0.10 | 0.075 | 0.75 | | |
| | Ch: (107 - 151) | | 2 | 44 | 0.10 | 0.075 | 0.66 | | |
| | Ch: (157 - 180) | | 2 | 23 | 0.10 | 0.075 | 0.35 | | |
| | Ch: (180 - 195) | | 2 | 15 | 0.10 | 0.075 | 0.23 | | |
| | Ch: (201 - 212) | | 2 | 11 | 0.10 | 0.075 | 0.17 | | |
| | Ch: (218 - 246) | | 2 | 28 | 0.10 | 0.075 | 0.42 | | |
| | Ch: (253 - 280) | | 2 | 27 | 0.10 | 0.075 | 0.41 | | |
| | Ch: (366 - 394) | | 2 | 28 | 0.10 | 0.075 | 0.42 | | |
| | Ch: (399 - 420.5) | | 2 | 21.5 | 0.10 | 0.075 | 0.32 | | |
| | Ch: (420.5 - 457.9) | | 2 | 37.4 | 0.10 | 0.075 | 0.56 | | |
| | | | | | | | 4.95 | 5767.46 | 28540.28 |
| 9 | KSRB 5-14 : Providing and constructing non load bearing wall with solid concrete blocks of size 400x100x200mm having block density not less than 1800kg/m3 having a minimum average compressive strength of 4.00N/mm2 confirming to IS 2185(part 1):2005 and constructed with CM 1:4 as per IS 2572 2005 including cost of all materials labour charges, scaffolding, curing , hire charges of machineries etc , complete as per specifications.KBS No 5.4 | | | | | | | | |
| | **(Page No 25., I.No.5.28 of KPWD S.R 2016-17).** | | | | | | | | |
| | | Sqm | | | | | | | |
| | *Basic rate* | *716.00* | | | | | | | |
| | *Area Wieght age @ 6%* | *42.96* | | | | | | | |
| | | *758.96* | | | | | | | |
| | *Flagging Course* | | | | | | | | |
| | **Maruthinagar 1st main road from Kogilu main road** | | | | | | | | |
| | **RHS** | | | | | | | | |
| | Ch: (0 - 20) | | 2 | 20 | | 0.200 | 8.00 | | |
| | Ch: (23 - 48) | | 2 | 25 | | 0.200 | 10.00 | | |
| | Ch: (53 - 103) | | 2 | 50 | | 0.200 | 20.00 | | |
| | Ch: (107 - 151) | | 2 | 44 | | 0.200 | 17.60 | | |
| | Ch: (157 - 180) | | 2 | 23 | | 0.200 | 9.20 | | |
| | Ch: (180 - 195) | | 2 | 15 | | 0.200 | 6.00 | | |
| | Ch: (201 - 212) | | 2 | 11 | | 0.200 | 4.40 | | |
| | Ch: (218 - 246) | | 2 | 28 | | 0.200 | 11.20 | | |
| | Ch: (253 - 280) | | 2 | 27 | | 0.200 | 10.80 | | |
| | Ch: (366 - 394) | | 2 | 28 | | 0.200 | 11.20 | | |
| | Ch: (399 - 420.5) | | 2 | 21.5 | | 0.200 | 8.60 | | |
| | Ch: (420.5 - 457.9) | | 2 | 37.4 | | 0.200 | 14.96 | | |
| | | | | | | | 131.96 | 758.96 | 100152.36 |
| 10 | Providing and fixing pre cast solid cement concrete kerb stones made out of C.C. 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork,curing,including cost of all materials, labour, hire charges of machinery, loading,unloading, lead and lift, transportation etc., complete | | | | | | | | |
| | **(Page No 25., I.No.5.30 of KPWD S.R 2016-17).** | | | | | | | | |
| | | No. | | | | | | | |
| | *Basic rate* | *313.00* | | | | | | | |
| | *Area Wieght age @ 6%* | *18.78* | | | | | | | |
| | *Total Rate in Rs* | *331.78* | | | | | | | |
| | **Maruthinagar 1st main road from Kogilu main road** | | | | | | | | |
| | **RHS** | | | | | | | | |
| | Ch: (0 - 20) | | 1 | 20 | | | 20.00 | | |
| | Ch: (23 - 48) | | 1 | 25 | | | 25.00 | | |
| | Ch: (53 - 103) | | 1 | 50 | | | 50.00 | | |
| | Ch: (107 - 151) | | 1 | 44 | | | 44.00 | | |
| | Ch: (157 - 180) | | 1 | 23 | | | 23.00 | | |
| | Ch: (180 - 195) | | 1 | 15 | | | 15.00 | | |
| | Ch: (201 - 212) | | 1 | 11 | | | 11.00 | | |
| | Ch: (218 - 246) | | 1 | 28 | | | 28.00 | | |

| No. | Description of item | Unit | Nos | Dimension | | | Total Qty | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| | | | | L in m | B in m | D in m | | | |
| | Ch: (253 - 280) | | 1 | 27 | | | 27.00 | | |
| | Ch: (288 - 316) | | 1 | 28 | | | 28.00 | | |
| | Ch: (316 - 394) | | 1 | 78 | | | 78.00 | | |
| | Ch: (399 - 420.5) | | 1 | 21.5 | | | 21.50 | | |
| | Ch: (420.5 - 457.9) | | 1 | 37.4 | | | 37.40 | | |
| | **LHS** | | | | | | | | |
| | Ch: (0 - 42) | | 1 | 42 | | | 42.00 | | |
| | Ch: (47 - 71) | | 1 | 24 | | | 24.00 | | |
| | Ch: (75 - 269) | | 1 | 194 | | | 194.00 | | |
| | Ch: (201 - 271) | | 1 | 70 | | | 70.00 | | |
| | Ch: (277 - 314) | | 1 | 37 | | | 37.00 | | |
| | Ch: (395 - 420.5) | | 1 | 25.5 | | | 25.50 | | |
| | Ch: (420.5 - 431) | | 1 | 10.5 | | | 10.50 | | |
| | Ch: (439 - 457.9) | | 1 | 18.9 | | | 18.90 | | |
| | Totoal length | | | | | | 829.80 | | |
| | In Nos | | | | | | 1844.00 | | |
| | | | | | | | **1844.00** | **331.78** | **611802.32** |
| 11 | KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8<br><br>(Page No 182, I.No.24.1 of KPWD S.R 2016-17). | | | | | | | | |
| | | **Sqm** | | | | | | | |
| | ***Basic rate*** | ***60.00*** | | | | | | | |
| | ***Area Wieght age @ 6%*** | ***3.60*** | | | | | | | |
| | ***Total Rate in Rs*** | ***63.60*** | | | | | | | |
| | **Kerb Painting** | | | | | | | | |
| | **Maruthinagar 1st main road from Kogilu main road** | | | | | | | | |
| | **RHS** | | | | | | | | |
| | Ch: (0 - 20) | | 1 | 20 | | 0.250 | 5.00 | | |
| | Ch: (25 - 50) | | 1 | 25 | | 0.250 | 6.25 | | |
| | Ch: (53 - 103) | | 1 | 50 | | 0.250 | 12.50 | | |
| | Ch: (107 - 151) | | 1 | 44 | | 0.250 | 11.00 | | |
| | Ch: (157 - 180) | | 1 | 23 | | 0.250 | 5.75 | | |
| | Ch: (180 - 195) | | 1 | 15 | | 0.250 | 3.75 | | |
| | Ch: (201 - 212) | | 1 | 11 | | 0.250 | 2.75 | | |
| | Ch: (218 - 246) | | 1 | 28 | | 0.250 | 7.00 | | |
| | Ch: (253 - 280) | | 1 | 27 | | 0.250 | 6.75 | | |
| | Ch: (288 - 316) | | 1 | 28 | | 0.250 | 7.00 | | |
| | Ch: (316 - 394) | | 1 | 78 | | 0.250 | 19.50 | | |
| | Ch: (399 - 420.5) | | 1 | 21.5 | | 0.250 | 5.38 | | |
| | Ch: (420.5 - 457.9) | | 1 | 37.4 | | 0.250 | 9.35 | | |
| | **LHS** | | | | | | | | |
| | Ch: (0 - 42) | | 1 | 42 | | 0.250 | 10.50 | | |
| | Ch: (48 - 72) | | 1 | 24 | | 0.250 | 6.00 | | |
| | Ch: (77 - 271) | | 1 | 194 | | 0.250 | 48.50 | | |
| | Ch: (275 - 345) | | 1 | 70 | | 0.250 | 17.50 | | |
| | Ch: (352 - 389) | | 1 | 37 | | 0.250 | 9.25 | | |
| | Ch: (395 - 420.5) | | 1 | 25.5 | | 0.250 | 6.38 | | |
| | Ch: (420.5 - 431) | | 1 | 10.5 | | 0.250 | 2.63 | | |
| | Ch: (439 - 457.9) | | 1 | 18.9 | | 0.250 | 4.72 | | |
| | | | | | | | **207.45** | **63.60** | **13193.82** |
| | **Sub total-1** | | | | | | | | **1640297.08** |
| | **ROAD WORKS** | | | | | | | | |
| 12 | KSRRB M300-14. Excavation for roadwork in all type of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No.301<br>**(Page No 143., I.No.19.14 of KPWD S.R 2016-17).** | | | | | | | | |
| | | **Cum.** | | | | | | | |

| Sl. No. | Description of item | Unit | Nos | Dimension | | | Total Qty | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| | | | | L in m | B in m | D in m | | | |
| | *Basic rate* | *46.00* | | | | | | | |
| | *Area Wieght age @ 6%* | *2.76* | | | | | | | |
| | *Total Rate in Rs* | *48.76* | | | | | | | |
| | new contruction | | | | | | | | |
| | **Maruthinagar 1st main road from Kogilu main road** | | | | | | | | |
| | *Ch: (0 - 103)* | | 1 | 103 | 8.80 | 0.350 | 317.24 | | |
| | *Ch: (103 - 178)* | | 1 | 75 | 5.90 | 0.350 | 154.88 | | |
| | *Ch: (178 - 245)* | | 1 | 67 | 8.80 | 0.350 | 206.36 | | |
| | *Ch: (245 - 313)* | | 1 | 68 | 8.10 | 0.350 | 192.78 | | |
| | *Ch: (313 - 389)* | | 1 | 76 | 10.90 | 0.350 | 289.94 | | |
| | *Ch: (389 - 420.5)* | | 1 | 31.5 | 9.70 | 0.350 | 106.94 | | |
| | *Ch: (420.5 - 457.9)* | | 1 | 37.4 | 9.70 | 0.350 | 126.97 | | |
| | | | | | | | **1395.11** | **48.76** | **68025.59** |
| **13** | KSRRB M400-6.1. Construction of granular sub-base by providing close graded material, crushed stone aggregates of granite/trap/basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method Close graded granular sub-base material as per 400-1 For Grading- II Material<br>**(Page No 155., I.No.20.4.2 of KPWD S.R 2016-17).** | | | | | | | | |
| | | **Cum.** | | | | | | | |
| | *Basic rate* | *1571.00* | | | | | | | |
| | *Area Wieght age @ 6%* | *94.26* | | | | | | | |
| | *Total Rate in Rs* | *1665.26* | | | | | | | |
| | new contruction | | | | | | | | |
| | **Maruthinagar 1st main road from Kogilu main road** | | | | | | | | |
| | *Ch: (0 - 103)* | | 1 | 103 | 8.80 | 0.150 | 135.96 | | |
| | *Ch: (103 - 178)* | | 1 | 75 | 5.90 | 0.150 | 66.38 | | |
| | *Ch: (178 - 245)* | | 1 | 67 | 8.80 | 0.150 | 88.44 | | |
| | *Ch: (245 - 313)* | | 1 | 68 | 8.10 | 0.150 | 82.62 | | |
| | *Ch: (313 - 389)* | | 1 | 76 | 10.90 | 0.150 | 124.26 | | |
| | *Ch: (389 - 420.5)* | | 1 | 31.5 | 9.70 | 0.150 | 45.83 | | |
| | *Ch: (420.5 - 457.9)* | | 1 | 37.4 | 9.70 | 0.150 | 54.42 | | |
| | | | | | | | **597.90** | **1665.26** | **995666.45** |
| **14** | KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite/trap/basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406<br>**(Page No 158., I.No.20.18 of KPWD S.R 2016-17).** | | | | | | | | |
| | | **Cum.** | | | | | | | |
| | *Basic rate* | *1668.00* | | | | | | | |
| | *Area Wieght age @ 6%* | *100.08* | | | | | | | |
| | *Total Rate in Rs* | *1768.08* | | | | | | | |
| | new contruction | | | | | | | | |
| | **Maruthinagar 1st main road from Kogilu main road** | | | | | | | | |
| | *Ch: (0 - 103)* | | 1 | 103 | 8.80 | 0.225 | 203.94 | | |
| | *Ch: (103 - 178)* | | 1 | 75 | 5.90 | 0.225 | 99.56 | | |
| | *Ch: (178 - 245)* | | 1 | 67 | 8.80 | 0.225 | 132.66 | | |
| | *Ch: (245 - 313)* | | 1 | 68 | 8.10 | 0.225 | 123.93 | | |
| | *Ch: (313 - 389)* | | 1 | 76 | 10.90 | 0.225 | 186.39 | | |
| | *Ch: (389 - 420.5)* | | 1 | 31.5 | 9.70 | 0.225 | 68.75 | | |
| | *Ch: (420.5 - 457.9)* | | 1 | 37.4 | 9.70 | 0.225 | 81.63 | | |
| | | | | | | | **896.86** | **1768.08** | **1585714.48** |

| No. | Item | Unit | Nos | Dimension | | | Total Qty | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| | | | | L in m | B in m | D in m | | | |
| 15 | KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WBM,WMM ,including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications. MORTH Specification No. 502 | | | | | | | | |
| | **(Page No 161., I.No.21.6 of KPWD S.R 2016-17).** | | | | | | | | |
| | ***Basic rate*** | **Sqm** | | | | | | | |
| | ***Area Wieght age @ 6%*** | ***26.00*** | | | | | | | |
| | ***Total Rate in Rs*** | ***1.56*** | | | | | | | |
| | **new contruction** | ***27.56*** | | | | | | | |
| | **Maruthinagar 1st main road from Kogilu main road** | | | | | | | | |
| | *Ch: (0 - 103)* | | 1 | 103 | 8.80 | | 906.40 | | |
| | *Ch: (103 - 178)* | | 1 | 75 | 5.90 | | 442.50 | | |
| | *Ch: (178 - 245)* | | 1 | 67 | 8.80 | | 589.60 | | |
| | *Ch: (245 - 313)* | | 1 | 68 | 8.10 | | 550.80 | | |
| | *Ch: (313 - 389)* | | 1 | 76 | 10.90 | | 828.40 | | |
| | *Ch: (389 - 420.5)* | | 1 | 31.5 | 9.70 | | 305.55 | | |
| | *Ch: (420.5 - 457.9)* | | 1 | 37.4 | 9.70 | | 362.78 | | |
| | | | | | | | **3986.03** | **27.56** | **109854.99** |
| 16 | KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH / Chapter 5 | | | | | | | | |
| | **(Page No 161., I.No.21.2 of KPWD S.R 2016-17).** | | | | | | | | |
| | | **Sqm** | | | | | | | |
| | ***Basic rate*** | ***3.00*** | | | | | | | |
| | ***Area Wieght age @ 6%*** | ***0.18*** | | | | | | | |
| | ***Total Rate in Rs*** | ***3.18*** | | | | | | | |
| | **1st Cross road from MB Bakery road to 2nd Cross** | | | | | | | | |
| | *Ch: (0 - 27)* | | 1 | 27 | 6.70 | | | | |
| | | | | | | | **0.00** | **3.18** | **0.00** |
| 17 | KSRRB 500-7. Providing and applying tack coat using 80/100 grade Bitumen (VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm , heating bitumen in boiler fitted with spray set (excluding cleaning of road surface ) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 | | | | | | | | |
| | **(Page No 161., I.No.21.7 of KPWD S.R 2016-17).** | | | | | | | | |
| | ***Basic rate*** | ***11.00*** | | | | | | | |
| | ***Area Wieght age @ 6%*** | ***0.66*** | | | | | | | |
| | ***Total Rate in Rs*** | ***11.66*** | | | | | | | |
| | **new contruction** | | | | | | | | |
| | **Maruthinagar 1st main road from Kogilu main road** | | | | | | | | |
| | *Ch: (0 - 103)* | | 1 | 103 | 8.80 | | 906.40 | | |
| | *Ch: (103 - 178)* | | 1 | 75 | 5.90 | | 442.50 | | |
| | *Ch: (178 - 245)* | | 1 | 67 | 8.80 | | 589.60 | | |
| | *Ch: (245 - 313)* | | 1 | 68 | 8.10 | | 550.80 | | |
| | *Ch: (313 - 389)* | | 1 | 76 | 10.90 | | 828.40 | | |
| | *Ch: (389 - 420.5)* | | 1 | 31.5 | 9.70 | | 305.55 | | |
| | *Ch: (420.5 - 457.9)* | | 1 | 37.4 | 9.70 | | 362.78 | | |
| | | | | | | | **3986.03** | **11.66** | **46477.11** |
| 18 | KSRRB M500- 17. Providing, laying dense graded bituminous macadam using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II(50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and filler, transporting the hot mix to work site , laying to the required grade,level and alignment, rolling with wheeled , vibratory and tandeem rollers to achieve the desired compaction as per MORTH Table-500-10 including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.507 | | | | | | | | |

| Sl. No. | Description of item | Unit | Nos | Dimension L in m | B in m | D in m | Total Qty | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| | (Page No 163., I.No.21.17.6 of KPWD S.R 2016-17). | | | | | | | | |
| | | Cum. | | | | | | | |
| | Basic rate | 6071.00 | | | | | | | |
| | Area Wieght age @ 6% | 364.26 | | | | | | | |
| | Total Rate in Rs | 6435.26 | | | | | | | |
| | new contruction | | | | | | | | |
| | Maruthinagar 1st main road from Kogilu main road | | | | | | | | |
| | Ch. (0 - 103) | | 1 | 103 | 8.80 | 0.050 | 45.32 | | |
| | Ch. (103 - 178) | | 1 | 75 | 5.90 | 0.050 | 22.13 | | |
| | Ch. (178 - 245) | | 1 | 67 | 8.80 | 0.050 | 29.48 | | |
| | Ch. (245 - 313) | | 1 | 68 | 8.10 | 0.050 | 27.54 | | |
| | Ch. (313 - 389) | | 1 | 76 | 10.90 | 0.050 | 41.42 | | |
| | Ch. (389 - 420.5) | | 1 | 31.5 | 9.70 | 0.050 | 15.28 | | |
| | Ch. (420.5 - 457.9) | | 1 | 37.4 | 9.70 | 0.050 | 18.14 | | |
| | | | | | | | 199.30 | 6435.26 | 1282556.97 |
| 19 | KSRRB M500- 19 Providing, laying bituminousConcrete using 40/60 TPH capacity H M P with Mechanical paver Gr-II(30mm to 45mm), crushed aggregates of specified grading premixed with 5.4% VG 30 grade bituminous binder and filler , transporting the hot mix to work site , laying to the required grade,level and alignment, rolling with wheeled , vibratory and tandeem rollers to achieve the desired compaction as per MORTH Table-500 9 including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.509 (Page No 165., I.No.21.22.6 of KPWD S.R 2016-17). | | | | | | | | |
| | | Cum. | | | | | | | |
| | Basic rate | 6859.00 | | | | | | | |
| | Area Wieght age @ 6% | 411.54 | | | | | | | |
| | Total Rate in Rs | 7270.54 | | | | | | | |
| | new contruction | | | | | | | | |
| | Maruthinagar 1st main road from Kogilu main road | | | | | | | | |
| | Ch. (0 - 103) | | 1 | 103 | 8.80 | 0.040 | 36.26 | | |
| | Ch. (103 - 178) | | 1 | 75 | 5.90 | 0.040 | 17.70 | | |
| | Ch. (178 - 245) | | 1 | 67 | 8.80 | 0.040 | 23.58 | | |
| | Ch. (245 - 313) | | 1 | 68 | 8.10 | 0.040 | 22.03 | | |
| | Ch. (313 - 389) | | 1 | 76 | 10.90 | 0.040 | 33.14 | | |
| | Ch. (389 - 420.5) | | 1 | 31.5 | 9.70 | 0.040 | 12.22 | | |
| | Ch. (420.5 - 457.9) | | 1 | 37.4 | 9.70 | 0.040 | 14.51 | | |
| | | | | | | | 159.44 | 7270.54 | 1159223.62 |
| 20 | Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 4kms. (Refer Table. Page No.140) | | | | | | | | |
| | | Cum. | | | | | | | |
| | Basic rate | 80.80 | | | | | | | |
| | Total Rate in Rs | 80.80 | | | | | | | |
| | For item no | | 2 | | | | 327.19 | | |
| | For item no | | 12 | | | | 1395.11 | | |
| | Sub total-1 | | | | | | 1722.30 | 80.80 | 139162.04 |
| | ROAD FURNITURES | | | | | | | | 5386681.25 |
| 21 | KSRRB M800-13 Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC 35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (Page No 185, I.No.24.15 of KPWD S.R 2016-17). | | | | | | | | |
| | Basic rate | Sqm 512.00 | | | | | | | |

| No. | Item | Unit | Nos | Dimension | | | Total Qty | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| | | | | L in m | B in m | D in m | | | |
| | *Area Wieght age @ 6%* | 30.72 | | | | | | | |
| | *Total Rate in Rs* | 542.72 | | | | | | | |
| | **Road Marking** | | | | | | | | |
| | **new contruction** | | | | | | | | |
| | **Maruthinagar 1st main road from Kogilu main road** | | | | | | | | |
| | *Ch: (0 - 103)* | | 2.5 | 103 | 0.10 | | 25.75 | | |
| | *Ch: (103 - 178)* | | 2.5 | 75 | 0.10 | | 18.75 | | |
| | *Ch: (178 - 245)* | | 2.5 | 67 | 0.10 | | 16.75 | | |
| | *Ch: (245 - 313)* | | 2.5 | 68 | 0.10 | | 17.00 | | |
| | *Ch: (313 - 389)* | | 2.5 | 76 | 0.10 | | 19.00 | | |
| | *Ch: (389 - 420.5)* | | 2.5 | 31.5 | 0.10 | | 7.88 | | |
| | *Ch: (420.5 - 457.9)* | | 2.5 | 37.4 | 0.10 | | 9.35 | | |
| | | | | | | | **114.48** | **542.72** | **62127.87** |
| 22 | KSRRB M800-35. Supply and installtion of moulded Shank Raised Pavement Markers made of polycarbonate and ABS (Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/NH/33023/10-97 - DO III Dt 11.06.1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 mm and with minimum reflective area of 13 sqcm on each side and the slope to the base shall be 35 degree. The srength of detachment of the integrated cylindrical shanks, (of diameter not less than 19mm and height not less than 30mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer with 2 years warranty for the reflectivity from the original manufacturer is mandatory along with necessory test certification from the certified laboratory. Third party test certificates from a reputed test laboratory shall be submitted with seal and Signature in Originals.<br>(Page No 189., I.No.24.41 of KPWD S.R 2016-17). | | | | | | | | |
| | | **No.** | | | | | | | |
| | *Basic rate* | **339.00** | | | | | | | |
| | *Area Wieght age @ 6%* | *20.34* | | | | | | | |
| | *Total Rate in Rs* | *359.34* | | | | | | | |
| | *Edges @9mc/c* | | | | | | | | |
| | **Maruthinagar 1st main road from Kogilu main road** | | | | | | | | |
| | *Ch: (0 - 103)* | | 2 | 103 | | | 206.00 | | |
| | *Ch: (103 - 178)* | | 2 | 75 | | | 150.00 | | |
| | *Ch: (178 - 245)* | | 2 | 67 | | | 134.00 | | |
| | *Ch: (245 - 313)* | | 2 | 68 | | | 136.00 | | |
| | *Ch: (313 - 389)* | | 2 | 76 | | | 152.00 | | |
| | *Ch: (389 - 420.5)* | | 2 | 31.5 | | | 63.00 | | |
| | *Ch: (420.5 - 457.9)* | | 2 | 37.4 | | | 74.80 | | |
| | *total length* | | | | | | 915.80 | | |
| | *6mc/c in nos* | | | | | | **153.00** | | |
| | **centre @9mc/c** | | | | | | | | |
| | **Maruthinagar 1st main road from Kogilu main road** | | | | | | | | |
| | *Ch: (0 - 103)* | | 1 | 103 | | | 103.00 | | |
| | *Ch: (103 - 178)* | | 1 | 75 | | | 75.00 | | |
| | *Ch: (178 - 245)* | | 1 | 67 | | | 67.00 | | |
| | *Ch: (245 - 313)* | | 1 | 68 | | | 68.00 | | |
| | *Ch: (313 - 389)* | | 1 | 76 | | | 76.00 | | |

| Sl. No. | Description of item | Unit | Nos | Dimension | | | Total Qty | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| | | | | L in m | B in m | D in m | | | |
| | Ch: (389 - 420.5) | | 1 | 31.5 | | | 31.50 | | |
| | Ch: (420.5 - 457.9) | | 1 | 37.4 | | | 37.40 | | |
| | total length | | | | | | 457.90 | | |
| | 9mc/c in nos | | | | | | 51.00 | | |
| | | | | | | | 204.00 | 359.34 | 73305.36 |
| | Sub Total-3 | | | | | | | | 135433.23 |
| | Total | | | | | | | | 7162411.56 |
| 23 | Cost towards Preperation of DPR,PMC/QC @ 2% | | | | | | | | 143248.23 |
| 24 | Cost of Plastic@ 8% of bitumen qty for BC | Kg | 1 | 1798.50 | | | | 27.00 | 48559.41 |
| 25 | Cost towards KIRDL Charges @ 9% | | | | | | | | 644617.04 |
| 26 | Miscllenous and other charges | | | | | | | | 1163.75 |
| | Grand Total | | | | | | | | 8000000.00 |

**Certificate:-**

1. That the workspot has been inspected and provisions made in the estimate are adequate and necessary
2. Work spot comes with in the Bruhat Bangalore Mahanagara Palike Limits
3. That estimate is based on the PWD SR of 2016-17
4. The work is not split up
5. These works are not taken up in any grants and free from defect liability period
6. Earlier improvements taken up in the proposed roads are recorded in road history

Mecadez Core Technologies Pvt. Ltd.

**Consultant**
**For M/s Mecadez core technologies pvt ltd**

**Asst. Engineer**
**Ward No:1**
**BBMP**

**AEE**
**yelahanka Sub division**
**BBMP**

**Executive Engineer**
**yelahanka division**
**BBMP**

Administrative Sanction for Rs. 80.00 lacs
Eighty Lacks only

accorded under head P 3089-
2015-16

registered as CE (NP) ..... Subject
conditions complied

EE/YNK/AA/12/17-18

Executive Engineer

**Technical Sanction**
Accorded For 80.00 lakh Rs.
Head of A/C... P3089
CER NO :... 62 ... Dt:.. 29/06/17

TA to CE (YNK)